Resource Pack

for Operational Guidelines for mainstreaming gender in EnDev projects

endev

Energising change

Contents

Introduction

This Resource Pack is an accompanying document for the EnDev Gender Strategy and the Operational Guidelines for Mainstreaming Gender in EnDev projects. It has been developed to reflect the needs of EnDev country projects as they embark on mainstreaming gender in their activities.

It contains various example and resources that can be used to mainstream gender in energy projects and includes general reading as well as tools, questionnaires, guidelines and sample Terms of Reference (ToRs). Please note, however, that you will most likely need to adapt this information according to your specific sector and regional needs.

Resource 1

Guides and resources on gender mainstreaming in energy sector

Gender mainstreaming guides

1. ESMAP: Gender and Social Inclusion, Online Resource for Integrating Gender into Energy Operations STEP 1.

2. Elizabeth Cecelski and Soma Dutta (2021): Mainstreaming gender in energy projects: a practical handbook. ENERGIA.

3. World Bank (2013): Integrating Gender Considerations into Energy Operations. Energy Sector Management Assistance Program (ESMAP); Knowledge Series 014/13.

4. AADB (2012): Gender Tool Kit: Energy: Going Beyond the Meter.

5. African Development Bank (2009): Checklist for gender mainstreaming in the infrastructure sector. 2009.

Resources on women's entrepreneurship

1. Soma Dutta (2019): Supporting Last-Mile Women Energy Entrepreneurs: What Works and What Does Not. Experiences from ENERGIA's Women's Economic Empowerment (WEE) Programme in Indonesia, Kenya, Nepal, Nigeria, Senegal, Tanzania and Uganda, ENERGIA.

2. ILO: Start and Improve Your Business (SIYB) programme: a management-training programme that focuses on starting and improving small businesses as a strategy for creating more and better employment in developing economies.

3. ILO: Expand Your Business (EYB) offering: an integrated business training and support package for small- to medium-scale enterprises that have growth objectives in mind.

4. Clean Cooking Alliance: The Empowered Entrepreneur Training Handbook: provides business skills, empowerment and leadership training curricula and tools that can be implemented to support women sales agents and entrepreneurs with whom you work.

Resource 2

Description of Task and Sample Terms of Reference

ToR for a gender focal point

The gender focal point will act as a resource person on gender mainstreaming for the team. He/she will consult management in the planning, implementation, monitoring and evaluation of the EnDev gender strategy, and raise awareness for gender issues among colleagues and partners. Specific tasks include the following:

Planning phase

- Plan and guide the gender analysis, including consulting with the project team
- Assist project teams to review the gender analysis and design gender focused activities, develop and refine targets for the proposal
- Develop a capacity development plan on gender for the project team and partners

Implementation

- Coordinate and support the preparation of a detailed gender action plan
- Facilitate implementation of gender activities in the project
- Advocate for integration of a gender approach with partner organisations and national governments
- Network with national gender machineries, civil society organisations and academia
- Support capacity building efforts within the team and among partners civil society

Monitoring and reporting

- Assist in developing a sex-disaggregated project monitoring and evaluation system, including coordinating the timelines, means of verification and collection of data
- Consult regularly with female and male beneficiaries
- Support knowledge management through the compilation and dissemination of lessons learned and promising practices
- Ensure the integration of a gender perspective for in terms of reference for appraisal missions, studies and evaluations
- Identify and appoint gender specialists, if necessary
- Report on the progress towards gender equality on a regular basis

ToR for consultant/ gender expert for gender analysis

The Gender Expert is expected to undertake a gender analysis in order to effectively mainstream gender into the design and formulation of the project. Specifically, under the supervision of the project manager and in close collaboration with industry/sector experts, the Gender Expert will undertake the tasks below.

- Review relevant EnDev documents on the requirements for gender mainstreaming, including the EnDev strategy document and the Gender Strategy.
- Conduct a detailed gender analysis, particularly emphasizing access to energy services and use of energy services, gender division of labour, control of energy sources and technologies, women's and men's energy needs and preferences, and opportunities for and constraints on women's participation.
- Make recommendations for the upcoming project

The gender analysis will assess and identify potential gender-differentiated impacts of the project. For this, the consultant will:

- Assess the national enabling environment including gender and energy sector policies, and programmes.
- Identify government agencies, NGOs, community-based organisations and women's associations or groups working on gender and energy or climate change that can be consulted during project preparation and could potentially be implementation partners. Assess their capacity.
- Collect sex-disaggregated data from the communities where the project will be implemented that could be used to monitor potential gender impacts.
- Based on gender analysis, identify gender gaps and opportunities and make recommendations on entry points for mainstreaming gender into the project, including gender specific project components, gender-responsive targets and indicators aligned with the EnDev logframe, timelines, assigned responsibilities and implementation arrangements.
- Provide rough cost estimates for the implementation of the plan of action for gender mainstreaming.
- Integrate relevant gender components in the project document, including cost estimates for its implementation.

Further GIZ document concerning the Safeguards and Gender Management System and thus on the Gender Analysis can be found here, while Standard TORs for gender analysis can be also found here.

Resource 3

Detailed guidance on conducting gender analysis

Step 1: Literature review

A gender analysis should begin with conducting a literature review and mapping existing data on gender and energy. In many cases, most of the gender and energy quantitative and qualitative data may already exist.

Specific issues for examination include the following:

- Demographic data, disaggregated by gender (e.g., life expectancy, literacy, child mortality, percentage of woman-headed households, poverty level)
- Main sources of livelihoods and income for women and men
- Legal status of women in relation to the project (e.g., access to land and other productive resources)
- Gender based inequalities and discriminations that may exist
- Key energy policies, legislations and regulatory framework and the reference to gender issues
- Research reports and studies on energy access and gender issues
- Potential organisations (government and others) who can be project partners

Data and information sources include:

- Census data on household electricity connections, and household members' health and education status
- National demographic and health sample surveys, with data on types and quantities of energy consumed, energy use in homes and businesses, and health status, and the data can generally be classified and analyzed by consumption level, income level, location, and sex of a household head.
- Data collected by utilities on energy access and end-user data
- Existing gender and energy literature in the country, such as country gender assessments, and other research and studies.
- Humanitarian assessment reports
- The Empowered Entrepreneur Training Handbook by the Clean Cooking Alliance provides business skills, empowerment and leadership training curricula and tools that can be implemented to support women sales agents and entrepreneurs with whom you work.

Step 2: Collect gender information from the community

The gender analysis can be used to identify social and gender issues of the proposed project area. It can help to develop monitoring indicators of project impact. Primary data collection should be designed once the existing secondary data is collected and the data gaps are identified. The methods of collecting the primary data may vary, but they should follow gender-inclusive and participatory processes, including socioeconomic household surveys; community level and focus group discussions targeting women. In participatory research assessment, some of the commonly used tools include the Harvard Analytical Framework and the Moser Gender Planning Framework and the Women's Empowerment Framework.

At the community level, the gender analysis needs to examine:

- Gender based role division: What are the tasks and activities performed by women and men in the community? What energy services do they use? Are there any time, mobility, social/ other constraints that may interfere with women's participation in project activities?
- Access to and control of resources: Are there any gender-based constraints in access and control of resources (e.g., land/ property needed to access water, energy, technology, credit, education, training, markets, and information networks) that would be necessary for them to participate in the project.
- Decision-making power: Are there any cultural, social, legal, and other constraints limiting women's participation in decision making at the household and community levels, or the use of resources and distribution of project benefits.

Table 1: Issues for detailed investigation (adapted from ADB, 2012)

Demand-side: Information on women and men as users, customers, and beneficiaries

Issue	Key questions	Examples of baseline data to be collected
Access	• What is the current level of access to various energy sources and services (e.g., electricity, liquefied petroleum gas, kerosene, fuelwood) in the project area? • Is there a differential access among poor households and those headed by women? • How are energy sources for households collected? Can the proposed project include interventions to reduce women's time and drudgery of energy sources? Help them increase incomes?	• % of households, including poor ones and those headed by women with access to electricity (and other energy services) • Time spent or travel distance to access to fuelwood, kerosene, etc. for men and women • % of MSMEs with access to electricity and thermal energy
Energy use	• How is each type of energy used—by whom (e.g., households, micro- and small enterprises, energy enterprises, community services) and for what (e.g., water and sanitation, cooking, heating, lighting, entertainment, communication, income generation, health services, education)? • What is the priority energy use by women and what is the energy source for that?	• **Use of electricity and other energy sources (hours) for productive vs. reproductive purposes at households**
Affordability	• Are energy services and sources affordable, particularly to poor households and those headed by women? • What are the viable options to improve affordability for the poor households and those headed by women?	• Cost of connection and services vs. household income • Poverty among households headed by women
Environment, health, and safety	• Are women and children suffering from energy-related environment and health problems, such as smoke emissions and indoor pollution? • Are women's mobility and safety constrained due to poor energy services (e.g., unavailability of streetlights due to unreliable electricity supply)?	• Respiratory infection prevalence rate • Data on gender-based violence
User knowledge and access to information	• Do users know about efficient use of energy, availability of options, and how to adopt them? Can women in the community be active agents to drive energy-efficient use practices at the household? • Are women aware of the health impact of cookstoves and other unclean energy and solutions to address it?	• Level of awareness of energy-efficient use (disaggregated by sex
Capacity to adopt improved energy services	• Do women have voice in influencing decisions on purchase of energy technologies and services in households and communities? Can the project assist? • Do energy-based enterprises exist in the project area? Can women start such enterprises or be employed by them? • Do any local service providers (e.g., nongovernment organisations) exist to provide skills for women to run or be employed by energy-based enterprises? • Do women have access to finance to start such enterprises?	• % of women's representation in local decision-making bodies (as a proxy indicator) • Number of energy enterprises (with % owned by women) • % of women borrowers of microfinance and small and medium-sized enterprise finance

Possible impact of proposed project interventions	• Can the proposed project contribute to empowering women and/or narrowing gender gaps? • Is the proposed project likely to increase gender-specific risks (e.g., indebtedness, job loss, HIV and other communicable diseases, human trafficking, increased workload) or have adverse impacts disproportionately affecting women (environmental degradation, resettlement)? What measures should be included to ensure the above impact channels for gender benefits?	

Supply-side: Women and men as service providers, in government, and project management

Issue	Key questions	Examples of baseline data to be collected
Employment opportunities	• Are women currently employed in the sector (technology manufacturers, energy agencies and corporations)? • Can the project offer jobs for women (e.g., construction labor, project management staff, meter readers, customer service agents, office clerks, employment in energy companies)?	• % of women among employees (if possible by level) • Number of women-owned or -managed energy sector enterprises established • Number of women with technical skills
Decision making and Representation in management and sector	• Are women well represented in the management of companies, high-level committees, or boards in the sector? • Are women well represented in community level management structures?	• **% of women in management positions, committees, boards** • **% of women represented in electricity users groups, committees, cooperatives, utility management level etc**

Step 3: Assess gender capabilities in implementing partner organisations

Assessment of technical capacities and attitudes

- Who in the organisation is responsible for gender mainstreaming and what is their level of competence?
- What specific skills and tools do staff need to carry out their job in a gender aware way?
- To what extent do existing capacity-building initiatives pay attention to gender?
- What incentives are there to motivate staff to be (more) gender competent?
- Does staff responsible for gender have terms of reference, skills, resources, incentives and management support?

Accountability and tools

- Do existing procedures and tools include/reflect a gender perspective and how?
- What initiatives have been taken so far to engender tools and procedures?
- What mechanisms ensure the performance of gender responsible staff?
- What guidelines are available to staff to help them transform their existing tools and procedures, or create new ones?
- Is gender a criterion in the selection of partners, consultants, staff – women/men (how)?

Organisational culture

- What is the current gender balance of staff in different posts?
- How does information flow in the organisation, formally or informally? To what extent do these “flows” include women as well as men?
- What are the shared values of the organisation? How do these relate to gender equality?
- Is decision-making centralized or decentralized? To what extent do individual women and men have access to it?
- What is the attitude towards female/male staff? Are there any practices (e.g. working late) that discriminate against women/men?
- Are different needs of women and men taken into account (e.g. access to flexible work-time arrangements when parenting (for both), acceptance of parental leave for both, sanitary arrangements etc.)?

Additional resources for gender analysis

Tools and guidance:

1. GIZ: Gender analysis checklist for energy within a programme or project cycle.

2. ILO: A Conceptual Framework for Gender Analysis and Planning. On-line gender learning and information module from the ILO South-East Asia and the Pacific Multidisciplinary Advisory Team. Includes sections on common gender analysis frameworks.

3. CIDA (2010): Gender Equality Policy and Tools. Canadian International Development Agency. 2010. Includes gender analysis guidelines on what to ask and what to do.

4. ESMAP: Gender responsive rapid social assessment (tool).

Sources of secondary information:

1. ADB: Country and gender assessments. These reports provide an overview of gender and social inclusion issues in the ADB's developing member countries and analyze the various social identities and their impact on development outcomes.

2. AfDB: Country Gender Profiles. Covering various countries, this series of Country Reports provide information on institutional and legal frameworks, gender policy, socio economic context, demography, education, health, labor force and employment and political participation.

Community level data collection tools:

1. Candida March, Ines A. Smyth and Maitrayee Mukhopadhyay (2005): Gender Analysis Tools: A Guide to Gender-Analysis Frameworks. Covers key gender analysis frameworks, including strengths and weaknesses.

2. ESMAP: Module for gender disaggregated energy baseline survey.

3. ESMAP: Focus Groups and Other Participatory Tools.

4. ESMAP: Assessing Access and Control over Resources.

Organisational data collection tools:

1. Elisabeth Cecelski and Soma Dutta (2011): Interview guide for organizational assessment. Mainstreaming Gender in Energy Projects: A Practical Handbook, ENERGIA.

2. ESMAP: Semi-Structured Interview Guide For Organizational Assesment.

3. Elisabeth Cecelski and Soma Dutta (2011): Organisational analysis. Mainstreaming Gender in Energy Projects: A Practical Handbook, ENERGIA.

4. ESMAP: Online Resources for Integrating Gender into Energy Operations. Step 1: Gender Assessment Resources, Institutional Capacity Analysis.

Resource 4

Example ToC based on the EnDev ToC

This resource provides an example EnDev TOR, based on the TOR outlined in the Gender Strategy which is designed gender-sensitive.

Theory of Change integrating gender considerations

Impacts	**Energising Lives - Social development** • Improved quality of life for people, especially women and girls, through - Improved health (reduction in indoor air pollution/ reduced drudgery in household chores,improved healthcare services, improved healthcare services) - Reduction in risks of SGBV experienced during wood fuel collection - Improved education (through energization of educational institutions) - Improved energy services for water lifting, food processing	**Energising Opportunities - Economic development** • Poverty alleviation (reduction in time and effort spent by women on domestic chores) • Economic development (Increased income through energy entrepreneurship & productive use of energy) • Improved heath (reduction in indoor air pollution/ reduced drudgery in household chores, Improved healthcare) • Improved education (through energization of educational institutions)	**Energising Climate - Combating climate change** • Increased adoption of renewable energy technologies reduces GHG emissions
Outcome	**Outcome 1:** Women have access to and control over sustainable energy products and services **Outcome 2:** Women selling energy products and those engaged in other businesses gain from sale of energy products and from productive use of energy and from access to other resources, such as finance, entrepreneurial capacity building and business development services **Outcome 3:** Women enjoy productive employment in energy sector jobs **Outcome 4:** Women's representation, voice and leadership in the energy sector increased **Outcome 5:** Strengthened institutional capacity and processes on gender wihitn EnDev and the country projects		
Outputs and results	• Energy products and services offered are gender responsive and affordable and available to women • Social infrastructure, such as those on health and education, offer services that are responsive to women's needs • Productive use of energy interventions target women and address their needs of skill building, and access to finance and markets • Both men and women are well represented in training, workshops, meetings as well as stakeholder networks • Project monitoring framework, including indicators and data collection methods incorporate gender-disaggregation of data • Awareness raising conducted among programming staff and partners on gender issues in the energy sector		

Key interventions	• Expand supply of energy technologies, fuels and appliances that address women's practical, productive and where possible, strategic needs. In doing so, promote clean cooking technologies and fuels, and labour-saving appliances that reduce their drudgery and unpaid care work. • Provide energy services to social institutions that can benefit women, such as health clinics, water pumping, street lighting and schools Support women's businesses and enterprises in energy supply chains by providing skills, training, information, and access to finance, markets and networks • Support women MSMEs to benefit from productive uses of energy, through skill building, training, access to information, markets, finance, and networks • Support career advancement for women in energy supply chains by providing opportunities for training, skills and jobs • Strengthen women's decision-making power and confidence to improve their productivity, income and asset ownershipBuild women's competencies in operation and management of energy supply systems • Advocate with the private sector to include women in design, distribution and management of energy technologies and services • Strengthen partnerships and platforms, to elevate the importance of gender equality and women's empowerment as a priority to advance SDG 7 • Support energy sector institutions to enhance gender parity by increasing women's representation in leadership roles • Promote and disseminate EnDev Gender Strategy and operational guidelines • Build the capacity of EnDev project staff and implementing partner organisations to plan and implement gender focused actions • Strengthen monitoring and evaluation of gender results by strengthening the M&E framework and systematic collection, analysis and reporting on sex-disaggregated data, as relevant • Build strategic partnerships with organisations at the national, regional and global levels with relevant gender expertise		
Barriers	**Supply side barriers** • Energy technology suppliers may not see an added benfit in engaging women in their value chain • Technology producers may lack knowldge of the energy service needs of women and hence may not view them as significant client group	**Demand side barriers** • Women have limited independent income and decision-making within homes. This can limit them from voicing their preferences for any technology • Women's energy needs such as for clean cooking energy is not prioritised by households • Female-headed households may be poorer and unable to afford renewable energy technologies.	**Enabling environment barriers** • The added value of gender integration in energy sector interventions may not be apparent to policy makers and needs to be brought to the fore in discussions. • Gender focal points in energy ministries are often lacking in expertise and are under-funded. • Policies on poverty reduction, gender and energy sectors are often separate and unconnected. • Women's voices are often missing from policy dialogue.
Assumptions	• National governments and other stakeholders continue to prioritise and support gender equality and women's empowerment issues. • Sufficient resources are allocated for gender-focused actions planned by the country projects • The pandemic and other do not adversly affect the interventions		
Root cause and barriers	• Drudgery of women related to energy and time poverty • Lack of access to and control over productive resources • Women's limited access to education, training, skills, information and markets • Limited representation and decision-making roles for women in energy sector policies and programmes • Lack of gender statistics and sex-disaggregated data Lack of understanding among energy sector stakeholders about potential benefits of gender mainstreaming in energy sector		
Core problem	Cultural facors including gender norms and biases		

Resource 5

Suggested gender indicators for EnDev projects

This resource makes suggestions on possible indicators for the various impacts, outcomes and outputs in the EnDev logframe. This list has been put together based on three criteria:

- Drawn from international good practices (for example, World Bank gender tagging)
- Relevance to improving EnDev's work (for example, indicators that highlight gender inequalities and the need for better targeting)
- Feasibility of data collection (to the extent possible, can be collected from existing methods and data already used by EnDev M&E)

Suggestions on output level indicators

Output in EnDev Logframe	Suggested indicators
Output 1.1 Share of customers empowered to make investment decisions	• #/% female and male headed households or women/ men household customers "empowered" to make investment decisions • #/% women-run/men-run MSMEs "empowered" to make investment decisions • Decision-making at household level and MSME level about purchase and who will pay
Output 1.2 (Demand side): The share of additional customers reached by newly introduced or regionally expanded financial products for investment in needs-based, climate-friendly energy supply systems for consumptive and productive use	• #/% female and male headed households or women/ men household customers reached by financial products • #/% women-run/men-run MSMEs reached by financial products • Evidence of the type of financial incentives used to encourage women's energy investments, by households and by MSMEs (e.g., finance packages, tax benefits and rebates, subsidies, pilot schemes, partnerships with financial institutions, the private sector or women's associations)

Output 2.1 (Supply side): Scalable energy companies for needs-based, climate-friendly energy supply systems for consumptive use have increased their market share	• # women-led/men-led scalable energy companies that have increased their market share by 25% • % of scalable energy companies that include a gender-responsive business plan • Evidence of the type of BDS, training, financial incentives or other support provided to encourage growth of women's enterprises
Output 2.2 (Supply side): 10 suppliers have developed new business plans for energy for PUE	• # women-run/men-run suppliers • % of suppliers that include gender-responsive product design in their business plans
Output 3.1 (Enabling environment): framework conditions for needs-based, climate-friendly energy supply have been improved at political, legislative or regulatory level in 5 selected countries3	• No. of framework conditions related to gender governance in energy that have been improved at political, legislative or regulatory level
Output 3.2 (Enabling environment): Representatives of stakeholder networks in 5 selected countries confirm the added value of the support received or management competences in order to advocate for system change towards needs-based, climate-friendly energy supply.	• Representatives (35% of which are women) of stakeholder networks • 35% of stakeholder organisations represent initiatives a) with the explicit goal of promoting gender equality/a majority of their activities on gender or b) that are women's organisations and networks • # of new or stronger partnerships established a) on gender b) with women's organisations and networks
Output 4.1 Experience from 10 pilot projects on innovative cooking technologies analyzed for replication	• No. of pilot projects that include gender assessment identifying gender gaps, gender actions, and gender targets/indicators (M&E)
Output 4.2 Innovative and gender-sensitive concepts for PUE in selected value chains or for energy use in Sis replicated	• No. of innovative concepts for PUE or SI that include gender assessment identifying gender gaps, gender actions, and gender targets/indicators (M&E) • # of innovative concepts that include change in persistent inequalities (transformative change and/or women's empowerment), defined as closing gender gaps

Outcome level indicators

Outcome in EnDev Logframe	Suggested indicators
Outcome 1: Energy access	• % of households with access to clean cooking energy • #/% female headed and male headed households with connections for mini-grid and off-grid electricity
Outcome 2: Energy access for social infrastructure	• #/% male/ female w users of health social infrastructure before and after electrification or adequate thermal energy access • Maternity services options: Increase In (a) # of health services with nighttime/maternity services; (b) hours of available lighting in maternity; and (c) # of health services with adequate thermal energy for hot/boiling water; • #/% of SIs that reduce women's drudgery or increase women's safety eg water pumping, mills, food processing, public lighting • #/% of girls'/boys' schools or pupils with electricity or improved cooking services
Outcome 3: Energy access for MSMEs	• #/% women-run/men-run MSMEs that have gained access to needs-based, climate-friendly energy supply • # of targeted MSME value chains that have a majority of women-run enterprises • Other relevant gender indicators in GAPS: a. trained men/ women or # trainees with knowledge/skills gained through training b. male and female run enterprises supported for growth c. male and female run MSME groups supported d. women entrepreneurs making decisions in homes e. women entrepreneurs making decisions in businesses
Outcome 4: Job creation	• # of male/ female employees per enterprise and share of female employees per enterprise (%) • #/% women-run/men-run MSMEs in the production and sales of needs-based, climate-friendly energy supply • Other possible indicators related to gender equality in job creation: a. # men/ women trained/trainees with knowledge/skills b. Support to/# of enterprises growth c. Support to/# of women's producer groups d. Recruitment of w/m in non-traditional roles e. Types and levels of jobs (tech, non-tech, mgt, professional, admin) f. Decision making in homes and businesses g. Equal pay h. Conditions necessary for women to be employed (childcare, bathrooms)

Impact level indicators

Impact in EnDev Logframe	Suggested indicators
Impact 1: Poverty alleviation Households' savings (expenditures and validated time savings; net effect)	• Reduction in cooking-related work by main cook - fuel collection & preparation - utensil and kitchen cleaning - cooking time • Percentage change in expenditure on purchasing fuel/electricity for household energy needs in female-headed households
Impact 2: Health **2a** Reduction of individual exposure (duration and concentration) to harmful pollutants/smoke from biomass cooking and/or kerosene-burning lamps **2b** Improved preconditions for a higher quality of modern health services (cooling facilities for vaccines and medicine, lighting and reliable electricity supply for clinics or during nighttime.)	• Reduction in maternal mortality (See also Outcome 2 indicators)
Impact 3: Education Improved preconditions for a higher quality of primary/secondary education (lighting in schools, reliable electricity supply for digital equipment)	• See outcome 2 indicators (#/% of girls'/boys' schools or pupils with electricity, computers, improved cooking appliances, safe water and sanitation, and refrigeration)
Impact 4: Economic development Income from productive/income-generating use of energy (in small home-based business, micro-enterprise, cottage enterprise, small informal or formal enterprise)	• Women run/ men run MSMEs
Impact 5: Gender equality Contributions to gender equality addressing the practical needs of women and girls Increased income of women from productive use of energy along selected value chains / development of female share of contribution to household income	• Participation in markets (as employees/entrepreneurs) on equal terms (access to credits, training, equal salaries, promotions etc.) and specific needs (childcare, maternity leave) • Control over income women earn

Resource 6

Guidelines for planning gender-responsive projects

What kind of interventions are gender-responsive? You need to plan your gender focused interventions early on, as they will need to be included in the proposal, planned and budgeted for. In doing so, start with identifying the gender gap you want to address through your project or the opportunity that your project can seize to contribute to gender equality.

You need to consider the following, and the gender analysis should provide sufficient information on these.

Aligning technical interventions with gender-based needs and priorities:

- What tasks do men and women carry out in their daily lives? How do they provide for and use energy services? Prioritize technologies and services that are particularly beneficial to women and girls (e.g., clean cooking, energy for labour saving household appliances, connecting more female-headed households to the grid). COVID-19 may have placed additional domestic responsibilities on women. Consider whether your interventions can help to reduce some of these. Can the proposed project help reduce women's time and drudgery in their daily lives, or **meet their practical needs**?
- Are women engaged in some economic sectors where an energy input can enhance their productivity and incomes, for example in agriculture or horticulture in which renewables can be used for irrigation, for milling grains, for cold storage? This could be as part-time or full-time employees, wage labourers, entrepreneurs, in the formal or informal sectors? Can the project empower them economically, or **meet their productive needs**?
- Can the proposed project intervention contribute to empowering women and/or narrowing gender gaps? **Or address their strategic needs**? Through what impact channels (e.g., reduced workload, improved welfare, increased income, generated employment, enhanced household decision making, improved community facility)?
- When a new energy technology is to be introduced, consider what are the preferences, opportunities, and constraints by women and men as users (and, possibly, service providers in the case of community managed system)? Would the new technology increase or reduce women's workload?
- Consider technologies that can help mitigate gender-based vulnerabilities caused by COVID-19, including powering communication appliances such as solar radios and mobile phone chargers; salvage operations of women energy enterprises & productive use of energy; clean cooking & fast-track electricity access for healthcare facilities.

Ensuring participation and benefits:

- Do not assume that household composition is unitary, with resources, benefits and responsibilities shared equitably. Projects that fail to consider intrahousehold power dynamics can perpetuate inefficiencies and poor governance.
- When thinking through a project component and beneficiaries, such as ways to increase energy access, do not assume that 50 percent of the beneficiaries will be female. This would not measure progress in closing a meaningful gap between men and women in the energy sector.
- Do women have voice in influencing energy services and making decisions on energy use in households and communities? Can the project assist?
- Are there any factors that could possibly hinder how either women or men will benefit from the project interventions? Are they equally educated, have similar access to information and training? To credit? Are women's mobility and safety constrained due to poor energy services (e.g., unavailability of streetlights due to unreliable electricity supply)?
- You may need to include additional measures to help women overcome their capacity constraints. For example, in conducting trainings, you will need to ensure training curricula (see 4.2 Gender Guideline for further information) and tools are designed to accommodate the different education/skill levels that may exist between women and men. Similarly, local and timing of training will need to be convenient for women.
- To increase women's role in supply side functions, consider whether you need to incentivize women's participation in private sector companies.
- Sexual and gender-based violence is an issue that must be recognised and addressed. For example, improved cookstoves programmes can help reduce the need for women and girls to collect firewood, resulting in women and girls' reduced exposure to gender-based violence. Similarly, in refugee settings, lighting in common areas and public places frequented by girls is important.
- Men are often community and household gatekeepers with significant decision-making power. Hence, it is necessary to identify male champions willing to advocate for women to adopt new technologies, participate in project activities, attend trainings and meetings.

Resource 7

Developing a Gender Action Plan

A template for the Gender Action Plan

Developing a GAP would need to include the whole team, the local gender focal point and possibly the support of a specialized consultant. You can also reach out to the gender focal points at EnDev HQ level for further advise. The GAP document should contain the following elements:

1. Introduction: This section sets out the rational for gender mainstreaming. It sets out the background to the process

2. Gender Assessment: This section presents the results of the gender assessment which identifies gender gaps and issues which need to be addressed within the programme.

3. Gender Goals: This section gives the gender goals, objectives and outcomes for the programme which relate to the addressing the gender gaps and opportunities.

4. Actions: This section details the actions necessary for reaching the goals, objectives and outcomes identified. It specifies responsibilities for delivering these actions.

5. Monitoring and Evaluation Framework: This section describes the monitoring and evaluation framework to track progress with achieving the goals, objectives and outcomes. The responsibilities, the form and the frequency of monitoring and evaluation reporting should be specified.

6. Timeline & budget: A timeline sets milestones for the implementation of the GAP.

Sample Gender Action Plan (EnDev Uganda, 2021)

Gender goal:
Enhancing gender equality and women's economic empowerment through business development and improving and access to improved cooking technologies and practices

Component: Solar energy

Expected gender outcomes:

1. Economic empowerment of women through strengthening their employment and entrepreneurship among the MSMEs[1], solar distributors[2] and SIs

2. Improved quality of life for women, girls, boys and men through energy access

Key interventions and targets

1. Strengthen (disaggregated) gender data collection process (indicators e.g., people empowered to make investment decisions for needs-based, climate-friendly energy supply through awareness activities and pupils with access to improved educational facilities through electricity to be disaggregated by gender and age)

2. Increase women's employment along the solar value chain (at least 30% of 705 MSMES reached to be women-led and with a 50% share of women employees)

3. Increase energy access for women, girls, boys and men in households, social institutions and MSMES (542 SIs, 10,000 last mile households and at least 1000 MSMEs)

1 MSMEs here refers to the targeted commercial/business end users of the solar solutions
2 Solar distributor refers to the companies that sell and distribute solar solutions and products

Interventions and activities	Time frame (month/ year)	Responsible person	Estimated budget (in EURO)	Can it be managed within existing budget	What external support would you need to implement this action
Intervention 1: Strengthen (disaggregated) gender data collection process					
1. Include gender related aspects in verification of all the Solar RBFs e.g., through co-creation of questionnaires as well as set the collection of gender related data as requirement for the ToR for IVA, orient companies on data collection and analyse and report on this data, reporting templates for RBF partners. For example, all companies to report on gender, age, status etc of all customers.	2021-2024	Coordinator: Solar component, M&E "champion"	No cost implication	Yes	ENERGIA to review
2: Document lessons learnt from EnDev solar component's activities e.g., RBFs, the USEA competence cluster and call centre activities, the CRB pilot, awareness activities, that may further inform equal participation of men and women in expanding energy access. Specifically, for the Credit Reference (CRB) pilot project extract data on female customers and their ability of building up a credit history	2021-2024	Solar component team technical advisors in their respective activities	No cost implication	Yes	USEA, consultants for impact assessments where applicable Data from participating CRB on how many of female solar customers that could build up credit history
Intervention 2: Increase women's employment along the solar value chain					
1. Collaborate with companies that have a good representation of women in different departments inside the companies (e.g., sales, management, supply chain, technical etc.) At the very least, participating companies should have policies against sexual harassment and maternity and childcare benefits, aligned with national laws.	2021-2024	Solar component team technical advisors in their respective activities	No cost implication	Yes	
2. Build capacity of private sector partners on gender by supporting EnDev partner solar distributors to train the women employees (mentioned in point 1) in different positions so they can move up the company ladder. EnDev will explore collaborations with associations such as Sendea, USEA, Women in Renewable Energy (WREA) etc to train women employees and entrepreneurs in various renewable energy positions and organisations.	2021-2024	Gender Focal Point and other technical team members	10,000 Euro	No	ENERGIA, consultant, Sendea, WREA, USEA and other relevant associations
3. Support women groups/organisations and MSMEs with innovative business models focusing on PUE for agriculture. Possible through the SEFA innovation financing scheme. As per the concept note, points (max 10/100 total) will be awarded to applicants that are women or youth (<35 years), applicants that involve or partner with youth and/or women	2021-2023	SEFA TA	No cost implication	Yes	

Interventions and activities	Time frame (month/ year)	Responsible person	Estimated budget (in EURO)	Can it be managed within existing budget	What external support would you need to implement this action
Intervention 3: Increase energy access for women, girls, boys and men in households, social institutions and MSMES					
1. Incentivise private sector actors to actively approach women in their promotional activities through RBF incentives, to better address women's needs for energy access, their payment options and usage of energy technology. For example, actively reach out and increase energy access to women, women-headed households, women-headed businesses (at least 30% of total) or to women, girls, boys and men in social institutions (such as lighting of the common areas to increase security especially for girls and women in schools).	2021-2024	Solar component team technical advisors in their respective activities	10,000[3] EUR	No	ENERGIA
2. Ensure gender-sensitive messaging in awareness campaigns and communication materials	2021-2024	Solar component team technical advisors and gender focal point	No cost implication	Yes	
3. Capacitate women and men in the operation and maintenance of solar powered irrigation systems (At least 25% of total trained smallholder farmers must be women and 35% youth less than 35 years old). Additionally, ensure that the demonstration site(s) set up for business cases ensures equal participation of women and men in management and other activities.	2021-2024	SEFA TA	No cost implication	Yes	Consultant

3 Updated based on available budget: Needed as additional incentive over and above the planned RBF incentive to motivate solar companies to actively seek out and at least reach the 30% women-led businesses

Component: Cooking Energy

Expected gender outcomes:

1. Reduced time spent by women and girls on domestic chores such a firewood collection and thus freeing them for other social and productive activities, including education, study, and income-generation activities

2. Improved economic empowerment for women through strengthening their employment opportunities in the cookstove value chain and PUE

Key interventions and targets

(In case there are any existing gender interventions and sex-disaggregated targets in the proposal, please include those as well)

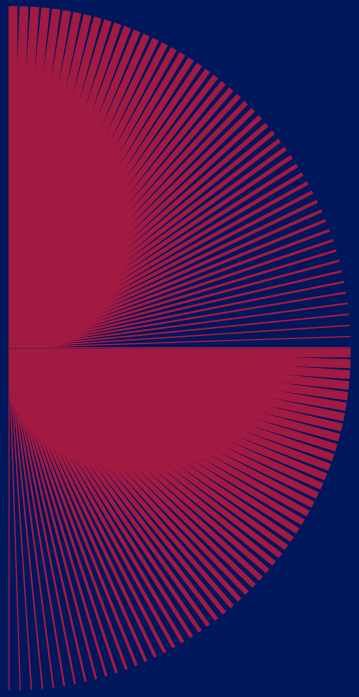
1. Support and incentivize partners to recruit more women as social mobilizers and sales agents

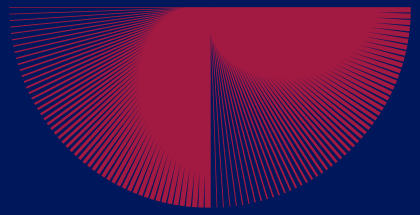
2. Conduct baseline/rapid assessment to analyse the usage and satisfaction characteristics of female PuE + HH ICS users to inform product design and future marketing strategies/campaign messaging

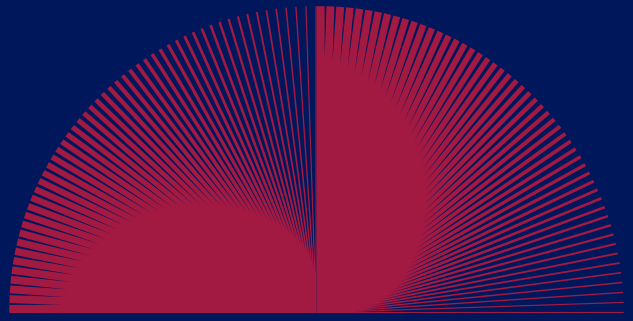
3. Support gender mainstreaming in sector coordination

Interventions and activities	Time frame (month/ year)	Responsible person	Estimated budget (in EURO)	Can it be managed within existing budget	What external support would you need to implement this action
Intervention 1: Integrate gender into the data collection system to analyse the usage and satisfaction characteristics of female PuE + HH ICS users and inform product design and future marketing strategies/campaign messaging					
1. Revise the final draft IVA ToR to include a special focus on female stove users and further pick comments from them relating to the use and benefits of the stoves, e.g., time saved, use of time saved	2021-2024	EnDev staff	N/A	Yes	This would be informed by findings from 1st Verification exercise of current RBFs
2. Support development and implementation of additional marketing support (e.g., digital marketing) to supplement partner RBFs sales achievements and boost female led SME and HH adoption of ICS	2021-2024	EnDev staff	EUR 2,500/year	Yes	Additional budget can be used from reduced RBF scope from running partnerships from 2021 if carried over to 2022
3. Update the planned RBF ToR + sales reporting template to include the gender of the stove buyers where possible. (the template was shared in for 2020/21 RBF partners, but the gender aspect wasn't included then).	2021-2024	EnDev staff	N/A	Yes	Partners can provide small incentive to sales agents to ensure all the sales reports include gender since over 70% of the sales have already been made.
Intervention 2: Support and incentivize partners to recruit more women as social mobilizers and sales agents					
1. Conduct sample survey following implementation of 2021/22 partner RBFs/BDS to assess transformative changes expected among women, for example, female sales agents (to inform adjustment of upcoming 2022 RBFs and gender related incentive structures)	2022-2023	EnDev staff	EUR 2,500	Yes	Feedback round included as part of post-verification of RBFs. BDS Impact assessment planned jointly with Solar Team
2. Develop support to partner SMEs that incorporates at least 50% female staff/beneficiaries, following the recent production infrastructure needs assessment report/recommendations	2021-2022	Consultant	N/A	Yes	Support planned to 3 SMEs from production assessment + Final stages of ILF (female facility upgrades) + ACE production support to set up manufacturing facility in Gulu with 50% female staff (includes training)
3. Carry out a scoping study on 2 women led RBF Partner SMEs (e.g. Mubende Stoves, BM Energy) to understand current challenges and develop tailored interventions for women led SMEs	2022-2023	EnDev staff	EUR 5,000	No	

Interventions and activities	Time frame (month/ year)	Responsible person	Estimated budget (in EURO)	Can it be managed within existing budget	What external support would you need to implement this action
Intervention 3: Support Gender mainstreaming in sector coordination (UNACC and other associations e.g. UNBA)					
1. Ensure that the new UNACC/UNBA staff recruitment caters for female staff as well, to at least 30%.	July-Nov 2021	EnDev staff	N/A	Yes	Partnership Contract with UNACC commenced in July 2021. Potential pilot biogas project with SNV to support UNBA in 2021-2024
2. Ensure that the implemented activities like workshops, field studies, awareness campaigns have female representation in lead positions and as participants reaching e.g., at least 30-40% and include content on gender	July-Nov 2021	UNACC staff	EUR 8,000	Yes	Workshops planned under UNACC support. Potential pilot biogas project with SNV to support UNBA in 2021-2024







Component: Refugees

Expected gender outcomes:

1. Increased adoption of modern cooking technologies and services for female headed and male headed HH in refugee settings

2. Increased availability of high-quality cooking and solar products and services for women and men in the local markets

3. Improved economic empowerment for women especially female entrepreneurs

4. Improved social services at social institutions benefitting women, girls, boys and men in refugee settings

5. Increased job creation for female PUE users (e.g. demonstration sites with existing users of improved cook stoves for productive use)

Key interventions and targets

1. Running of energy kiosks
   - At least 40% of energy kiosk management team members are female
   - Equal opportunities for female and male headed households benefit as customers

2. Implementation of RBFs
   - next RBFs: By Q1 2022, a system worked out for extra/higher incentives for RBF partners working with equal number of female sales agents and female vendors
   - Improved skills of female sale agents, vendors and marketers

3. Training of all RBF and kiosk teams on gender mainstreaming
   - At least 40% and ideally 50% female participants in trainings
   - Improved Knowledge, Attitude and Practice (KAP) results among training participants in post training test

4. Establish demonstration sites for community groups using modern, renewable energy for their enterprises with focus on groups having women in key leadership roles
   - At least 4 demonstration sites for groups that have a minimum of 50% women in key leadership roles. (leadership roles are usually: chair, vice chairperson, secretary general, treasurer, publicity secretary/mobiliser etc)

5. Tailored market activation events with specific gender messages
   - Role models of which at least 50% are women from the community
   - Use of gender sensitive awareness campaign materials

6. Solarization of three health centers
   - At least 500 people accessing health services disaggregated by gender and status, possibly age per day

7. Solarization of one secondary school
   - At least 500 learners benefitting from educational services disaggregated by gender, status and age

8. Pilot on productive use of energy with a focus on women entrepreneurs in the refugee setting with key partners including private sector and a partner working on gender, business and energy.
   - Support to at least 50 female entrepreneurs regarding productive use of energy in refugee settings

Interventions and activities	Time frame (month/ year)	Responsible person	Estimated budget (in EURO) Overall, we have 40,000 EUR for gender pilot activity and 60,000 plus EUR from RBF solar savings	Can it be managed within existing budget	What external support would you need to implement this action
Intervention 1: Energy Kiosks					
1. Training on gender accurate data collection for kiosk management teams	latest by December 2021 for existing teams and by February 2022 for new teams	Samuel/Chris	0	Yes	None
2. Training of kiosk management teams on provision of gender inclusive services by external consultants	Q1 and Q2 2022 for old and new teams	Ben	3,000	Yes	
3. Training of newly recruited female sales agents on market mapping, sales techniques, customer care, after sales services, agency and financial literacy, for solar electrical efficiency, safety and conservation. (external consultant)	Q1 and Q2 2022 for old and new teams	Ben	5000	Yes	ENERGIA to provide some draft tools such as a market mapping tool. If permissible provide training curricula or outlines.
Intervention 2. Implementation of RBFs					
1. Training of RBF partner coordinators on accurate gender data collection	January 2022	Samuel/Chris	0	Yes	
2. Analysing the gender disaggregated data by gender expert	January and June 2022	Samuel	800	Yes	Gender Expert
3. Incentivize private companies e.g. through RBF incentives to actively reach out and increase energy access to women, women-led households, and women-led businesses	RBF 2022	Samuel	RBF budgets	Yes	No
Intervention 3. Training of RBF and kiosk management teams					
1. General business skills and initial gender mainstreaming training for kiosk and RBF partners with at least minimum of 40% female participants of partners (affirmative action in selection of female beneficiaries and skill them)	December 2021	Samuel/Ben	11,241.37 (energy kiosk teams and HUMCs) 5000	Yes	

Interventions and activities	Time frame (month/ year)	Responsible person	Estimated budget (in EURO) Overall, we have 40,000 EUR for gender pilot activity and 60,000 plus EUR from RBF solar savings	Can it be managed within existing budget	What external support would you need to implement this action
Intervention 4. Renewable Energy Demonstration Sites for community groups					
1. Support set up of community RE demo sites as learning models/ business incubators	Oct/Nov	Chris	15,000	Yes	
Intervention 5. Market activation events with specific focus for female vendors and sales agents					
1. Support tailored market activation events with specific focus for female vendors and sales agents	Oct 2021	Ben/Samuel	5,000	Yes	
Intervention 6. Solarization of 3 Health Centers					
1. Three HCs solarized to bridge energy gap for improved service delivery in maternal care and other primary health care services	July 2021 (done)	Ben	30,000	Yes	None
2. Carry out immediate outcome assessment that includes quantitative data on gender, age and status and qualitative data on maternal care and other primary health care services	December 2021 to February 2022	Bettina	4,000	Yes	None
Intervention 7. Solarization of 1 Secondary School					
1. Carry out baseline assessment	September-November 2021	Ben	2,000	Yes	ENERGIA review the draft report (done – thank you)
2. Provide IT equipment to one solarized school to provide safe learning environment for girls and boys and quality IT classes	January/ February 2022	Ben	8,000+17,000	Yes	
3. Carry out immediate outcome assessment that includes quantitative data on gender, age and status of learners and quality of IT classes	April 2022	Ben	2,000	Yes	
Intervention 8. Pilot on productive use of energy with a focus on women entrepreneurs in the refugee setting					
1. Identify potential partners	September 2021	Bettina	0		
2. Design Project idea and approve grant agreement	January 2022	Bettina	100,000 (40,000 in budget line and reallocation from other budget line – or use of RBF)	Yes	

Case study on results of a Gender Action Planning process

Advancing gender equity in a solar off-grid company: PEG Afric

PEG Africa (PEG) is a company that provides solar home systems to customers in rural and remote parts of West Africa where there is no grid. Power Africa[4] worked with PEG to increase its internal gender capacity, and to strengthen the company's opportunities for women's economic empowerment. The exercise began with a baseline assessment, which revealed that internal policies were not gender-responsive, and the company's interaction with customers was gender neutral.

To address these gaps PEG developed a Gender Action Plan (GAP) whose objectives were:

- To increase the number of women in the company's decision-making positions by 15%;
- To strengthen the company's internal policy documents by adding gender considerations; and,
- To increase women's employment in field positions by 13% and gain at least 4000 more female customers.

The following actions were initiated:

- They employed a full-time Gender Projects Officer, to oversee implementation of the GAP and institutionalize gender in the company's operations.
- An internal mentorship programme targeting PEG staff was initiated, running over three months, where male and female director-level employees were paired to build women's capacity for leadership within the company.
- Conducted a pay-gap and promotion analysis which revealed big differences in the average pay between men and women, lack of equality at senior level positions, and promotions that were skewed in favour of men, among others.
- A standardized promotions policy was developed to addresses these discrepancies. An overarching Gender Equality Policy articulates the company's commitment to gender equality in recruitment and hiring, job assignments, bonuses and promotions, pay and benefits and training.
- Targeted sales to female customers especially those that were part of village savings and loan associations. Created new employment opportunities for women in rural areas.

After implementing the GAP for 12 months, PEG noted a 30% decrease in employee turnover, achieved a 14% increase in female leadership, increased collaboration and more meaningful engagement in meetings leading to better problem solving. The period also coincided with a 60% growth in revenue, and earnings before interest and taxes improved by 26%. Hugh Whalan, PEG's Co-Founder and CEO notes, "[Eventually] gender equality begins to drive itself. The more women are represented in leadership, the less one has to push for gender equality because it is visible".

Further details can be found in the documents below:

- Promoting gender equality in the off-grid energy sector through gender inclusive business practices: A case study of PEG Africa.
- Power Africa 2019. Power Africa case Study: Ghana, Advancing gender equality in Africa's Off-grid Energy Sector March 2019.
- Africa Clean Energy. Gender and Social Inclusion in Off-grid Solar: A handbook for Sub-Saharan Africa. GESI Handbook 2020041001.

4 Power Africa is a partnership that brings together technical and legal experts, the private sector, and governments from around the world to increase the number of people with access to power. Power Africa's goal is to add at least 30,000 megawatts (MW) of cleaner and more reliable electricity generation capacity and 60 million new home and business connections by 2030.

Resource 8

Guidance for conducting community consultations

EnDev projects need to consult with communities on a regular basis. Some strategies for ensuring that consultations are gender inclusive are as follows:

- Active facilitation techniques to encourage women's participation in public meetings or workshops. Techniques include working in smaller and/or single-sex groups; asking specifically "What do the women in the room think about this issue?"; using games, drama or drawing to increase women's level of comfort and contribution; and organising separate meetings specifically for women.
- Disaggregation of data by gender to better understand gender differences related to the project.
- Representative samples by gender in surveys and interviews to gather women's views of project related issues, including female-headed households.
- Ensuring gender-awareness of the whole team so that everyone appreciates the benefits of understanding the views of both men and women.
- Facilitation and encouragement of women's participation in consultation events. For example, by providing childcare; choosing a time of day, date, and location convenient for women; asking networks with predominantly female membership to encourage their members to participate; and providing transportation to and from the meeting venue. You may need to Provide additional resources required to ensure women's participation, for example, in cases in which women are not allowed to travel alone, invite two women instead of one. Further factors such as illiteracy and education level should be considered when selecting suitable facilitation methods. Have a plan for communicating the importance of gender issues that addresses different target audiences with appropriate messages and formats (consider differing levels of literacy, language, and access to media).

- Recognition that women are not a homogeneous group, and thereby providing adequate attention to ensure the representation of different perspectives across socioeconomic, caste, ethnic, and religious lines. Marital status and age are also important factors. Note: Remember to keep minutes and other relevant documentation of stakeholder meetings and distribute them to participants after the meeting. In case of formal meetings, the minutes should be agreed and signed by the relevant stakeholders.

When to have separate meetings for women and for men

- When there is strict sex segregation in the society
- When the topics of discussion are sensitive and tenuous between the sexes, such as sexuality, reproductive health and gender-based violence at home or at work (followed by mixed-sex groups later on)
- When cultural or religious customs strongly discourage or prohibit women and girls to speak up in the presence of men and boys
- When there is a need to build up women's self-confidence and capacity, and to encourage them to speak more freely, first among themselves and as appropriate later in mixed-sex groups

How to increase women's participation in meetings and workshops

- Be sensitive to the practical obstacles to women's participation, such as their family responsibilities, cultural and religious customs discouraging women's participation in public affairs or women's travelling alone, and concern for personal safety and security
- Plan or assist in providing practical and logistical arrangements to facilitate their participation such as: – meeting place and time that are convenient – adequate travel and transportation arrangements to and from the event – safety and security at the venue and accommodation – childcare facilities, as necessary

Resource 9

Practical case examples and additional resources for mainstreaming gender

Off grid solar technologies

Case example: Care International Kenya

In 2014, only 25% of Kenya's rural population had access to electricity. The main mode of electrification was extension of the national grid, though the use of solar lamps was picking up. At the same time unemployment in the country stood at 9.5%. Non-governmental organisations (NGOs) operating in the country were looking for innovative ways to alleviate poverty especially in the densely populated regions. In the same year, Care International Kenya was running the Lighting Kenya Project to enhance the economic independence of youth and women through entrepreneurship, specifically through the selling solar lamps. The project was funded by Barclays Bank of Kenya (now Absa Kenya) and implemented in six counties – Embu, Homabay, Kisii, Kisumu, Migori and Nairobi.

The project recruited women and youth and trained them on managing small businesses and the benefits of solar lamps. After the training, the entrepreneurs were expected to raise start-up capital of Ksh 20,000 (USD 200). Those who successfully raised the amount were required to further recruit another 10 sales agents from the community, to create a more effective last-mile distribution network.

One of the major challenges was skepticism among the solar entrepreneurs, many of them gave up when they realized they needed to raise the start-up capital, CARE International in Kenya was not providing capital. However, when people began making sales, they looked for the capital and re-joined the project. The impact of the project on the community was phenomenal; traders at the local market used the solar lamps to keep their businesses open for longer hours, and the security around the market improved. Children studied for longer hours in the evening and were happy to use the solar lamp which was brighter than the kerosene lamps they used before. The impact for entrepreneurs like Josephine were even greater, she built a four-bedroom permanent house from the business profits. By the end of 2015, 18,294 women and youth had been trained on entrepreneurship. Later, as the solar market in Kenya expanded and other distributors came in, they recruited the solar entrepreneurs who had been trained and gained experience under the Lighting Kenya Project. By funding the Project, Barclays Bank aimed at deepening financial inclusion among vulnerable people.

The experience shows that companies need to support a range of activities including:

- Training and skills-building in use of OGS, management, productive use of solar energy
- Provision of linkages with credit-giving institutions specifically targeted to marginalized groups
- Creation of new entrepreneurship or job opportunities, particularly for the youth

Additional resources:

- Lighting Africa IFC (2011): Expanding Women's Role in Africa's Modern Off-Grid Lighting Markets.
- African Clean Energy (2020): Gender and Social Inclusion in Off-grid Solar: A handbook for Sub-Saharan Africa in: GESI Handbook.

Minigrids

Case Example: Biogas Sector Partnership–Nepal-(BSP-Nepal)

Rural electrification through renewable energy is the flagship project of Milinda Foundation, and is aimed at providing access to electricity to rural and tribal communities through a system of renewable energy based nano- and mini-grids that are paid for by the communities.

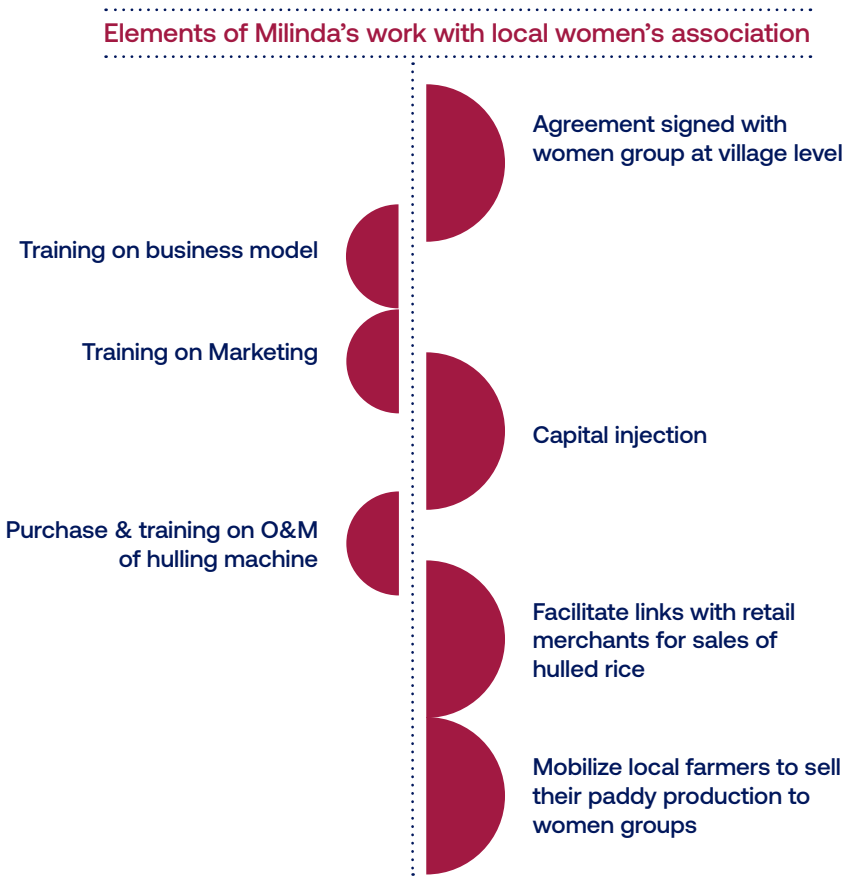
Till date, Milinda has commissioned 310 nano- and micro-grids (ranging from 150 Wp to 8 kWp) with an installed base of 105 kWp in India. On an average, each village of average size 150 households has energized three rice hullers (of 0.74 kW each), three irrigation pumps (of 8 HP each) and 20 pumps of 1.5 HP each. These machines also act as anchor loads for the mini-grid and improve the utilization and commercial viability. Given that agriculture is the primary livelihood in rural India, the farm economy is dependent on irrigation pumps and rice hulling machines which presently operate on inefficient and polluting diesel machines. Milinda has till date fielded 45 numbers of small 0.75 HP electric irrigation pumps, four 7.5 HP electric pumps and seven electric rice hullers in the four villages.

In addition to farm loads, Milinda is innovating other diverse community based 'anchor' loads. In the tribal village of Narotoli, lighting and heating of the 58 poultry coops through Infra-Red lamps for heating that serve an anchor load. With help from Smart Power India we are in the process of incubating a mini cold storage ecosystem in the village of Pasanga that will act as an anchor and also contribute to increasing farm incomes. Apart from growing the productive farm loads, Milinda engages with domestic users to introduce low- wattage domestic appliances in local communities such as TVs and refrigerators.

Milinda field teams work with existing social capital, involving diverse stakeholders - individual entrepreneurs, existing women groups and farmers clubs, user groups and local governance structures. Towards measuring impact of our rural electrification initiative through mini grids at three key levels- increase in productive demand, growth in village GDP and reduction in GHG emissions.

Additional resources:

- ESMAP (2017): Minigrids & gender equality: inclusive design, better development outcomes: Key issues, and potential actions.
- Amanda Soler, Jens Jæger, David Lecoque; Alliance for Rural Electrification (2017): Women Entrepreneurs as Key Drivers in the Decentralised Renewable Energy Sector Best Practices and Innovative Business Model.
- Alliance for Rural Electrification (2016): Productive Use of Renewable Energy | The Alliance for Rural Electrification.



Cooking energy

Case Example: Biogas Sector Partnership–Nepal-(BSP-Nepal)

Biogas Sector Partnership–Nepal-(BSP-Nepal) is a professional non-governmental organisation involved in developing and promoting appropriate rural and renewable energy technologies, particularly, biogas, effective in improving livelihood of the rural people. It was established in 2003.

BSP has disseminated over 100,000 bigas plants in Nepal using a market-based approach with a pro-poor focus. The project encourages the private sector through a variety of supportive measures and ensuring their accountability for constructing high quality biogas plants and providing service back up. Among other strategies, BSP Nepal has worked closely with women, as biogas masons as well as consumers.

Actions to encourage women as masons

Commonly held perception in South Asia is that women are not strong enough and not technically inclined to do the physical work associated with masonry. In many cultures, it is also not accepted that women do this kind of work. Women masons in the Nepal Biogas programme have gone through this very phase, and have, over time, managed to gain confidence in the market as well as respect from their families. This achievement has taken many years but today, the biogas programme has not only women masons but women operating as supervisors as well as proprietors of biogas companies.

Strategies that worked well include:

- A visible commitment to gender issues at the programme level, and articulated at the highest levels
- Conducting special women focused masons training programmes
- Additional affirmative action to encourage women as masons
  - Conducing special training for women masons to build their confidence and skills, and following this up with combined (men and women together) refresher training,
  - Women masons are allowed to take up the job as per their convenience with respect to geographical area they want to operate in, the company they want to work for and staying overnight at the site
  - Ensuring conducive atmosphere for women masons through provision of personal security while attending the train (provision for companion while attending trainings), organising child care, holding trainings close to women's homes
- A continuous process of encouraging men counterparts, especially the owners of biogas companies. With support from BSP, many biogas companies conduct Extension Orientation Training for personnel from the banks and 1/NGOs, and in all of these, participation of women is highly emphasized. Some of the training on O&M include women users only.

Other activities include:

Encouraging rural women to become masons through women mobilizers. Today women farmers themselves, on hearing about the trainings via friends and women mobilizers, approach BSP that they wish to join, as it gives them a good new job opportunity.

- Norms on women's participation (50%) in user trainings
- Targeted training for Women Mobilizers/motivators
- 50 women cooperatives have been mobilised for loans
- Priority to women entrepreneurs in order to establish biogas (6 women owned biogas companies), provision of separate training and incentives to women masons, award for best mason/supervisor/entrepreneur [women and men separately]

Other examples of demand side interventions involving men in behavioural change campaigns:

- EcoZoom often engages men in one-on-one discussions and encourages their participation at stove testing activities. EcoZoom also ensures both men and women in the household are comfortable if participating in in-home trials or small-scale pilots.
- Potential Energy, which works in Sudan, found that men may try to answer questions for the women, which impedes their ability to receive accurate information. In response, they use teams of two (one male and one female) to conduct surveys with and cooking observations of local women. The male team member consults with the men outside of the home while the female team member consults with the women inside the home. For larger group discussions, the staff will often begin the meetings with both women and men and then separate into single-sex groups to continue the dialogue.

Additional resources:

- Corinne Hart and Genevieve Smith; Clean Cooking Alliance (2013): Scaling Adoption of Clean Cooking Solutions through Women's Empowerment | Clean Cooking Alliance.
- Clean Cooking Alliance: Behavior Change Communication (BCC) Resource Hub

Refugee settings

Case example: Solar power for internally displaced women in Nigeria

Solar Sister recruits, trains and supports women entrepreneurs to build businesses and bring clean energy to their communities. As at March 2020, the organisation had reached 1.5 million people across Africa with solar energy and clean cookstoves, and kickstarted over 4,000 clean energy entrepreneurs. (www.solarsister.org)

Solar has been working with internally displaced women in Nigeria. The Boko Haram insurgency in North-East Nigeria that began in 2009 has caused displacement of over 2 million people and affected another 15 million, leading to a high incidence of poverty. As a result, the region lags behind compared to the rest of the country in terms of access to quality education, energy, healthcare and other basic amenities. It also hosts internally displaced people who are affected by loss of property and diminished livelihoods. Incidents of gender-based violence and early marriages are also common in this area.

In early 2019, Solar Sister launched a Humanitarian project to respond to the crisis in Bauchi State, one of the states that has taken in many of displaced people. The Project aimed at improving livelihoods and access to clean energy for the community. In collaboration with local authorities, five local authorities were selected to take part in the project. Local champions were identified, and later 200 female Internally Displaced Persons (IDPs) were selected to take part in the project. The women were trained and received the business-in-a-bag start-up kit to set-up their businesses. The start-up kit consists of marketing materials and business tools. The women received the initial inventory from Solar Sister. Further coaching and training were done each month. During these sessions, women discussed challenges with their coaches, equipped with leadership skills, and taught how to save and re-invest their profits. Culturally in Bauchi, men have the purchasing power and make decisions on what should be bought. Women on the other hand are not allowed to step out for business or social engagements without their husbands' permission. They are also not permitted to talk to men other than their husbands. These limitations had to be addressed before the women were trained. They were overcome by involving community leaders and government officials right from the beginning of the project and on case-by-case basis whenever the need arose.

In six months, the 200 women sold 4148 solar products and clean cookstoves, reaching over 20,000 beneficiaries. All the women gained self-employment skills and 128 of them launched full Solar Sister businesses.

Case example: Improving Safe Access to Fuel and Energy (SAFE) in north-eastern Nigeria

Armed conflict in north-eastern Nigeria – Adamawa, Borno and Yobe States – has driven millions from their homes and uprooted agriculture-based livelihoods. In worst affected Borno State, poor energy access has exposed vulnerable people to a number of challenges linked to food insecurity and malnutrition (e.g., insufficient fuel to cook food), deforestation (e.g., unsustainable felling of trees for fuel), protection risks (e.g., harassment, assault, physical and sexual violence when collecting wood fuel) and health risks (smoke inhalation leading to respiratory illnesses).

The main types of energy resources in north-eastern Nigeria are firewood and charcoal. When using inefficient energy technologies, such as open fires, the demand for these energy resources is high. In response, FAO is implementing SAFE, following a three-way programmatic approach, namely: (i) reducing energy demand by promoting fuel-efficient technologies; (ii) increasing energy supply through sustainable forestry management practices; and (iii) promoting safe and sustainable livelihoods.

With the support of Norway and in partnership with the International Centre for Energy, Environment and Development, FAO established three production centres in Borno for fuel-efficient stoves (FES) in 2017 and trained 100 local artisans in their production and marketing. Between May and August 2018, the first 5 000 locally produced cooking stoves were distributed in Maiduguri, Jere and Konduga local government areas of Borno. In order to increase impact for existing FAO beneficiaries, the stove distribution was linked to FAO's micro-gardening programme, adding another dimension of resilience to affected households.

To evaluate the impact of the stove distribution (December 2018), FAO undertook a household survey including 111 female beneficiaries from camps in and around Maiduguri. The results were as follows:

- 98.2 percent of the respondents were still using the fuel-efficient stove at the time of the assessment.
- 100 percent of respondents indicated the FES has improved their energy situation, and that they can better cover in their daily cooking fuel needs.
- 46.9 percent of respondents indicated that they do not have sufficient access to fuel. Although the figure is still high, it is less than prior to the distribution of the FES (76 percent in April 2018)[5].

Additional resources:

- GIZ Uganda (2019): Toolbox for Energy Assessments in Refugee Settlements and Host Communities.
- Laura Patel and Katie Gross; Energy 4 Impact (2019): Cooking in Displacement Settings Engaging the Private Sector in Non-wood-based Fuel Supply.
- Mercy Corps (2019): ENERGY, GENDER, AND GBV IN EMERGENCIES State of Principles, Knowledge, and Practice.
- Global Alliance for Clean Cookstoves (2018): Inyenyeri Clean Cooking Pilot in Kigeme Refugee Camp.
- Women Refugee commission, Mercy Corps: Energy in emergencies: mitigating risks of gender-based violence: Uganda case study.

5 Further details of results achieved can be found at Improving Safe Access to Fuel and Energy in north-eastern Nigeria (fao.org)

Resource 10

Guidance for data collection for gender value chain analysis

Example: Gender value chain analysis for ICS producer enterprises, Tanzania

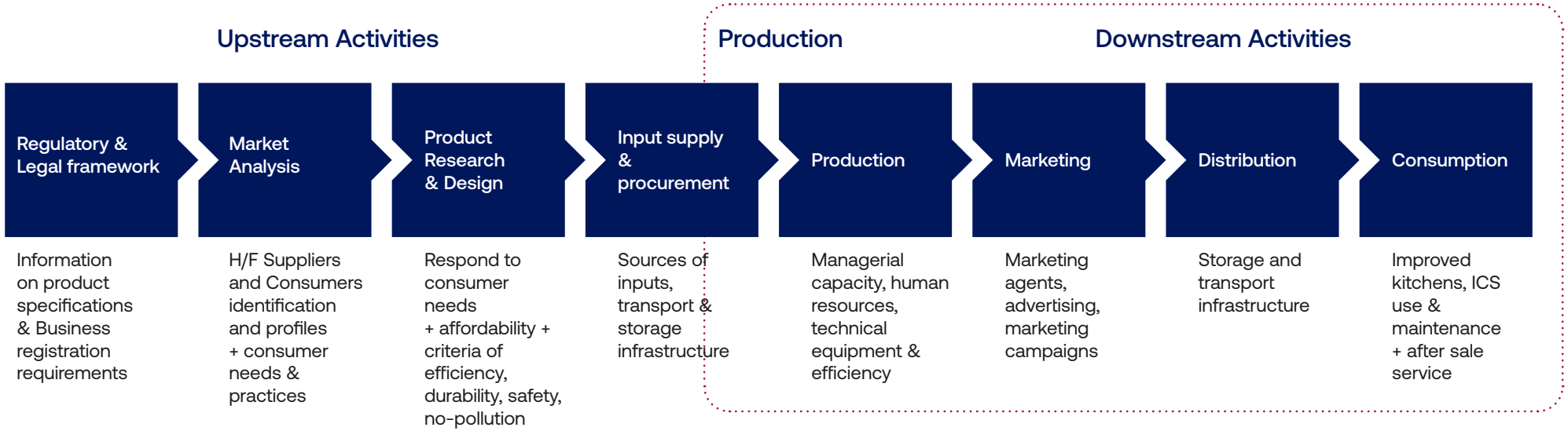
Objectives of the gender value chain analysis[6]

Assess the opportunities for women to realistically obtain greater benefits from the ICS production. This will be done through:

- Mapping women's and men's current roles and constraints in the value-chain
- What additional inputs (skills, support services, financing) do they need to move to higher levels in the value chain?
- Exploring whether any of these can be made available through the EnDev project? What are specific project actions needed?

This value chain analysis has been carried out for the ICS production part (the circled part of the value chain below). A complete value chain analysis should include a similar analysis for all upstream and downstream stages.

6 A value chain refers to the activities that add value to the service and/or product that a business produces; all these activities should be run at optimum level if the business is to gain any real competitive advantage. Information and financing are pre-conditions to the successful operation of the value chain. Value chain activities span upstream activities, production, and downstream activities.



Steps

Before going to the field

1. From the ones you are working with, identify the various types of ICS producers ((a) men/ women owned, (b) type of business, for example, liner manufacturer, cladding manufacture, clay supplier, ceramic stove producers etc. (c) size of business, (d) level of revenue/sales (from GIZ records).
2. Select 6-8 ICS producers, ensuring that all the above types are covered.

In the field (at stove producers)

1. Visit these (expected time required at each unit: 3 hours)
2. Interview the owner and map the various activities in the complete value chain (including the average monthly income earned in each function by men and by women, and the number of men and women in each activity). Include this in table 1.
3. Request him/ her to introduce you to a few women engaged in in each function and talk to them as a group. (refer to guide for discussion with groups of women below)
4. Write down your observations in the table attached (table 2).

After

1. It is advisable to include the information in the form of an Excel file, for your own records later.
2. Discuss in your office each of the suggested strategies and assess their feasibility, as well as any risks that may be associated with this upgradation. You can record it like table 4.
3. You should also consider other actions in the complete value chain (see slide 7 of the attached PowerPoint)
4. Based on the above as well as willingness of a stove producer, select a few actions. It is advisable that you start with easier actions and then move on to more complex ones that may require more resources and partners.

Points for discussion with ICS producer owner

(Note down the name, sex, location of the unit, type of business and average monthly revenue). Document the profile of the stove producers in terms of which type of ICS they produce, where do they get their inputs to make the stoves, who are the input suppliers (men/women), do they have contracts with them; how are the downstream activities organised and "staffed"? Also collect and record employment data in table 1.

- Which are the various activities that you conduct in running your business (please list all activities in the first column of the table)?
- Which are the activities in which more women are engaged? In which activities are the men engaged? {{Also identify if there are any activities that are carried out, but are unpaid/ family labour}}}. Probe if there are differentials in remuneration for female and male staff/members with similar qualifications and skill.
- Which activities generate most value? Are women equally represented here or under-represented? Why?
- What in your view, could be some ways for women to work in more profitable parts of the value chain? What can be done to support this?
- Do you think in your company, there are some women who would be willing to put in extra effort to do so? Would they be supported by the families to do so?
- What additional inputs would they need?
- In what ways can YOU support some women to move to higher value functions?
- What inputs can the project provide?

Guide for discussion with groups of women engaged in each part of the value chain

There is no need to get specific details of individuals. Raise a question and let the group respond. Note down your observations in table 2 in the example below.

Initiate a discussion along the following lines:

- Since how long have you all been working here? Who among you has been working here the longest time?
- What is the activity you all are engaged in?
- Given your skills (education/ technical skills/etc.) and convenience (flexibility, timing, easy work), is this the best possible job for you in this ICS workshop?
- Do you think you could be engaged in some other activity that would fetch you more income? For example, as stove agents?
- What is holding you back from engaging in higher value activities?
- What are your suggestions to help you get involved in higher value activities? How can the project help?
- If you were to get additional training and get involved in some other, higher paying activity, would your family be supportive?
- Assess the skill gaps to improve production performance and quality of product? (this can also be discussed with the ICS producer)? What do they need: business development services/ technical training/ technology modification)?
- Do women possess the necessary managerial and accounting skills to become ICS producers/ employees/ sales agents/ input suppliers?
- In case they want to set up or expand their businesses (in case of women stove enterprise owner), do women have access to finance (formal/ informal)? Do they experience different difficulties than men when requesting a formal loan? (What?) Do they have the required collateral? Can they meet other loan conditions?
- What financial instruments/ facilities are available to support women? Men? What are the pros and cons of those instruments?
- Do women have the financial capacity and credit to invest in raw materials, technology, etc. to increase production?

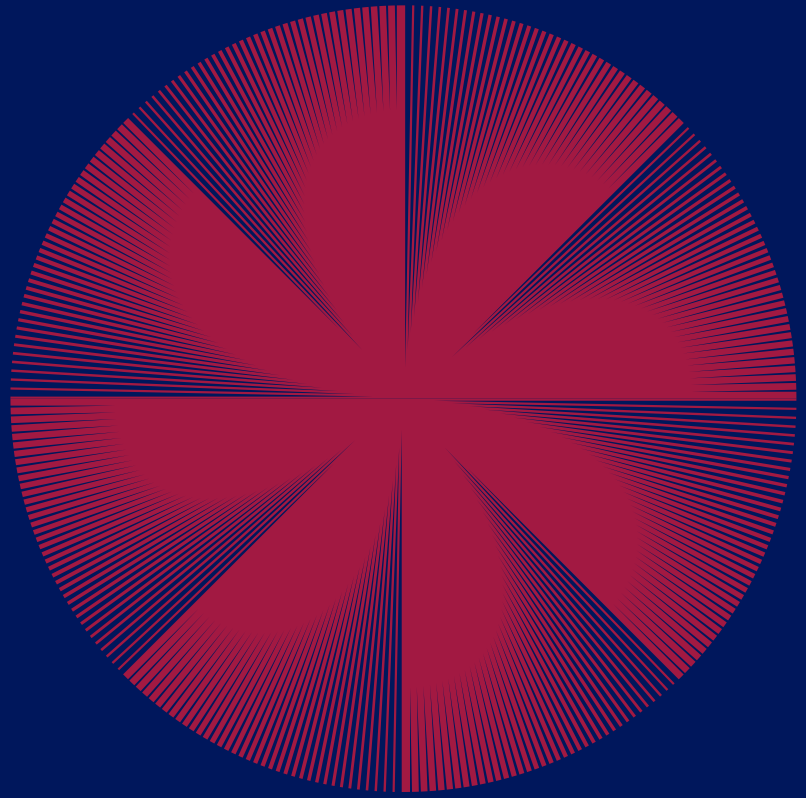
Table 1: Information on men and women in the value chain

Activity in value chain (use each row for an activity)	Average earning per month/ day	No. of women engaged		No. of men engaged	
		Full time/ employees	Part time/ casual/ seasonal	Full time/ employees	Part time/ casual/ seasonal

Table 2. Gender Based Constraints per Actor and Activity in ICS Value Chain

Description	Description of activities under each node of the Market Chain	Responsibilities /Role and level of Implication by Gender (who carries out this activity		What Constraints are faced that limit their growth to higher income parts of the value chain		Possible strategies for upgrading (record the suggestions made by the respondents here. These can be analysed later)
		Male	Female	Male	Female	
Input Supply	1. Hardware 2. Clay Miner				Women lack finance to buy materials for metallic stoves	
Production	1. Clay collection		X			
	2. Water Collection		X			
	3. Firewood collection		X			
	4. Metal material collection (Buying)	X	X			
	5. Making Ceramic Stoves			Men Perceive Ceramic production are women activities.		
	6. Making Metallic Stoves	X			Women lack interest on metallic stoves production because of perception it is men activities. Metallic materials are very expensive, women find difficult to buy. Metallic Stoves production involve a lot process, women find the process to be very difficult.	

Distribution	Transportation Distribution Channel				Women are constraints of mobility issues Women are constraint with Domestic chores Lack of Market Information	
Marketing	Agents				Lack of Market Information	
Consumption						



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